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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BORISSOV, IGOR N

ART UNIT

PAPER NUMBER

3628

NOTIFICATION DATE

DELIVERY MODE

12/07/2012

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 08/977,846	Applicant(s) RYAN, JOHN O.	
	Examiner IGOR BORISSOV	Art Unit 3628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2012.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1 and 33-92 is/are pending in the application.
- 5a) Of the above claim(s) 65-90 is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1, 33-64 and 91-92 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 3) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 4) ☐ Other: ____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/01/2012 has been entered.

Response to Amendment

Amendment received on 10/01/2012 is acknowledged and entered. Claims 65-90 have been withdrawn. Claims 2-32 have previously been canceled. Claims 1, 58, and 91 have been amended. Claims 1 and 33-92 are currently pending in the application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1.1 Claims 1, 33-44, 49, 52, 54-56, and 58-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Bey (WO 99/03112) in view of Schwob (US 5,152,011) further in view of Yoshio et al. (JP 4310631) further in view of Browne et al. (WO 92/22983) and further in view of Kirkland (US 5,677,739).

As per Claims 1 and 58.

De Bey ('112) discloses:

a tuner that receives a broadcast signal, see Fig. 2 (40) and page 10 lines 26-30 and page 11, lines 4-5;

a memory coupled to the tuner for storing data in the received broadcast signal in a database, see Fig. 2 (42, 42);

a processor, coupled to the tuner and the memory, the processor processes the received broadcast signal including data, stores the data as a database in a memory, provides a user interface for selecting data in the database, provides the selected data in digital form and converts the selected data from digital form to an analog signal, provides a user interface for interacting with the database, see Fig. 2 (keypad 54, TV 44 provides user input to select program stored in memories 42, 46);

the processor is configured to provide the user interface for selecting data from the database in response to the accepted selections and providing the selected data in a digital form, see Fig. 2 (52) and page 9, lines 10-11, page 19, lines 32-33;

a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal, see page 8, line 4), wherein receiving, processing and viewing broadcasted TV program, including visual and audible information, suggests the use of an audio amplifier (page 1, lines 15-16), wherein the processor controls operation of analog and digital signals.

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Schwob ('011) disclose a broadcast receiver including an audio amplifier and speakers for reproducing a recorded broadcasted signal, Fig. 1 (26), said receiver is configured for automatically updating its database (Abstract; C. 8, L. 5-10). Schwob further discloses a user interface having user input means for interaction with a receiver, including buttons corresponding to various type of programming, including news, classical music, jazz, etc., and means for presenting selected information in succession to the user (Fig. 5, "200"). In use, the user, by repeatedly pressing appropriate buttons interacts with receiver database for selecting appropriate information for desired geographical region (C. 10, L. 40-65; C. 11, L. 20-45).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify De Bey to include an amplifier, as taught by Schwob ('011), for the benefit of amplifying signals sent to speakers, and to include the "updating" feature, as disclosed in Schwob, for the benefit of eliminating the need to replace the ROM too often, as specifically stated in Schwob.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify De Bey to include the recited limitations, as taught by Schwob ('011), since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P.

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Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

While the combination of De Bey and Schwob teaches that the user interface is configured to enable an access to the program stored in the database, provide the user with information based on user's input, and accept selections from the provided information, the combination does not explicitly teach that said succession or set of presented information includes a set of *menus* describing the database.

Yoshio et al ('631) (Yoshio) discloses:

a tuner for receiving a broadcast signal,

a memory coupled to the tuner for storing data in the received broadcast signal in a database,

a user interface for providing a set of *menus describing the database, and for accepting selections from the set of menus*, see page 25, [0009] line 5; [0010] line 6; page 27, [0013]; Page 28, [0015].

Further, said set of menus is disclosed in Browne et al. (Browne), which teaches a receiver adapted to receive data contained in a transmitted broadcast signal comprising:

a tuner that receives a broadcast signal, (Fig. 7, item 702; page 9, lines 20-24);

a memory coupled to the tuner for storing data in the received broadcast signal in a database, (Fig. 1, item 104);

a processor, coupled to the tuner and the memory, the processor processes the received broadcast signal including data, stores the data as a database in a memory, provides a user interface for providing a set of menus describing the database, and for accepting selections from the set of menus (Fig. 1, item 105a; page 13, lines 11 - page 14, line 8);

for selecting data from the database in response to the accepted selections and providing the selected data in a digital form (Fig. 1, items 104, 105, 105a; page 13, lines 18- page 14, line 8); and

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a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal (Fig. 1, item 110; page 15, lines 7-13), wherein the processor controls operation of analog and digital signals.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of De Bey and Schwob to include that the user interface provides *a set of menus describing the database, and accepts selections from the set of menus*, as disclosed in Yoshio and Browne, because it would advantageously allow to organize the programs by the interest or designate the programs by a reference point, thereby permitting the user to select the desired channel quickly without memorizing the program code, as specifically stated in Yoshio.

Alternatively, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of De Bey and Schwob to include the recited limitations, as disclosed in Yoshio, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

The combination of De Bey, Schwob, Yoshio and Browne does not specifically teach a switch that provides the data to the speech synthesizer or the

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audio amplifier, wherein, if the data is the alphanumeric data, the switch provides the alphanumeric data to the speech synthesizer and, if the data is the audio data, the switch provides the audio data to the audio amplifier, which is disclosed in Kirkland (Fig. 1, "105" acts as a switch; separates incoming data to text-to-speech processing "106" or audio processing "audio" output to "108"; Fig. 2, note the amplifier "203"; C. 6, L. 29-46; C. 7, L. 13-28).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination of De Bey, Schwob, Yoshio and Browne to include the recited limitations, as disclosed in Kirkland, because it would advantageously allow transmission services via channels for which there is less competition, and whereby the descriptions may be provided in stereo, as specifically stated in Kirkland (C. 2, L. 19-22).

Alternatively, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination of De Bey, Schwob, Yoshio and Browne to include the recited limitations, as disclosed in Kirkland, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

As per Claim 33.

De Bey ('112) further discloses the memory stores the entire database,

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see page 7, lines 1-33 and page 11, lines 12-15.

As per Claim 34.

De Bey ('112) further discloses the memory comprises a combination of volatile RAM and non-volatile memory, see page 7, lines 10-33 and page 11, lines 12-15.

As per Claim 35.

De Bey ('112) further discloses non-volatile memories such as ROM, see page 7, lines 10-33 and page 11, lines 12-15.

As per Claim 36.

De Bey ('112) further discloses the received audio data has been converted from analog form to digital form, see page 9, lines 36-38.

As per Claim 37.

De Bey ('112) further discloses the received audio data is digitized and has been compressed, see page 9, lines 36-38.

As per Claim 38.

De Bey ('112) further discloses the received audio data is encrypted, see page 11, lines 30-38.

As per Claim 39.

While De Bey ('122) teaches that the disclosed system provides transmission optimization for either digital or analog information signals, Be Bey does not specifically disclose analog to digital conversion.

Yoshio ('631) further discloses that the received data has been converted from analog form to digital form, see page 26, lines 17-19 as an old and well known method of reproducing signals.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include that said data is use the analog to digital conversion of Yoshio ('631) as an old and well

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known method of reproducing signals. As per “alphanumeric” data per se, Kirkland discloses this feature it does not matter what type of data (the content of data) being converted, because the content of data cannot affect the method step performed. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination to include that said converted data is “alphanumeric” data, for the benefit of transmitting all intended information to the viewer.

As per Claim 40.

Kirkland teaches that the received data is alphanumeric data which is converted to voice data by a speech synthesizer. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

As per claim 41.

De Bey ('112) further discloses the data is in digital form, see page 9, line 11, encrypted, see page 11, lines 30-31, and compressed, see page 11, line 12, and further comprising a decryptor for decrypting the data, see page 11, lines 31-32.

As per Claim 42.

De Bey ('112) further discloses a decompression algorithm to decompress data that has been compressed at a transmitter prior to being broadcast, see figure 2 (40, 50), and page 111, lines 12-15.

As per Claim 43.

De Bey (112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1.

As per Claim 44.

De Bey (112) further discloses the decryptor is enabled by a key received

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by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1, states that the key can be included as a prefix to the data packet received by the receiver 40.

As per Claim 49.

Schwob and Kirkland both disclose an amplifier for amplifying the analog signal, and means for converting the amplified signal to sound Fig. 1 (26), (27) for the benefit of amplifying signals sent to speakers. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

As per Claim 52.

De Bey ('112) further discloses the memory stores the data received in a random access memory up to the capacity of the random access memory before transmitting said data to one of a disk medium or tape medium, see page 7, lines 23-25.

As per Claim 54.

Yoshio ('631) further discloses disk medium is a magnetic disk, see page 27, lines 18-19. The motivation to combine the references would be utilizing standard media for recording for the benefit of maximizing public acceptance of the product.

As per Claim 55.

Yoshio ('631) further discloses disk medium is a magnetic-optical disk, see page 27, lines 18-19. The motivation to combine the references would be to utilize standard media for recording for the benefit of maximizing public acceptance of the product.

As per Claim 56.

De Bey (112) further discloses optical disk, see page 7, line 27.

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As per Claim 59.

Same rationale as applied to claims 1 and 58.

As per Claim 60, 61.

Yoshio ('631) further discloses that the broadcasted data, which the tuner is adapted to record, includes the at least one entire program, such as news or English courses, see page 26, lines 14-20. The motivation to combine the references would be to provide convenience to the user to listen uninterrupted program. Alternatively, it is noted that claims 60, 61 do not provide any indication/limitations of the volume of data to be received or memory capacity of the device. As such, the content of the received and stored data cannot affect the fact that the data has been stored, regardless is it the at least one entire program, a portion of the program, or a set of programs.

1.2 Claims 45-48, 50-51, 53, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Bey in view of Schwob, further in view of Yoshio, further in view of Browne, further in view of Kirkland and further in view of Official Notice.

As per Claim 45.

The combination of De Bey, Schwob, Yoshio, Browne and Kirkland does not teach that the user interface is voice activated.

Official Notice is taken that speech recognition is old and well known, as evidenced in Takahashi (US 4,682,368), column 2, lines 11-60, for the benefit of hands free operation of the device.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include a voice activated user interface, as taught by Takahashi ('368), for the benefit of hands free operation of the device.

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Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include a voice activated user interface, as taught by Takahashi, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

As per Claim 46.

While Yosio teaches that the playback device is mounted on a vehicle (page 28, [0014] line 7), the combination of De Bey, Schwob, Yoshio, Browne and Kirkland does not explicitly teach:

- a manual input device adapted to be mountable on an automobile steering wheel; and

- a link from the manual input device to the controller.

Official Notice is taken that control systems on automobile steering wheels are well known, as seen in Guenther et al (US 5,086,510) (Guenther) figure 4, for the benefit of better visibility of controls for the user.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include mounting controls on an automobile steering wheel and linking it to the controller, as disclosed in Guenther for the benefit of better visibility of the

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controls for the user.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include mounting controls on an automobile steering wheel and linking it to the controller, as disclosed in Guenther, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

As per Claim 47.

The combination of De Bey, Schwob, Yoshio, Browne and Kirkland does not teach a control for determining the speed at which the speech output device outputs the analog signal.

Official notice is taken that it is old and well known to determine the speed at which the speech device output the output signal, as can be seen in Benbassat et al (US 4,700,322) (Benbassat) column 1, lines 28-50, for the benefit of synchronizing speech with the visualization of messages.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include determining the speed at which the speech device output the output signal, as taught by Benbassat ('322) for the benefit of synchronizing speech

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with the visualization of messages.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include determining the speed at which the speech device output the output signal, as taught by Benbassat ('322), since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

As per Claim 48.

The combination of De Bey, Schwob, Yoshio, Browne and Kirkland does not disclose that the tuner channel skips to tune to a particular transmitter.

Official Notice is taken that it is old and well known to skip channels to get to the desired transmitter, as seen in Whitby et al (GB 2 258 102) (Whitby) page 6, lines 13-21, for the benefit of presetting the device to access a specific transmitter.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include to skip channels to get to the desired transmitter, as taught by Whitby ('102) for the benefit of presetting the device to access a specific transmitter.

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Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include to skip channels to get to the desired transmitter, as taught by Whitby ('102) since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

As per Claim 50.

While Yosio teaches that the playback device is mounted on a vehicle (page 28, [0014] line 7), the combination of De Bey, Schwob, Yoshio, Browne and Kirkland does not explicitly teach means for connecting the receiving system to an automobile radio set.

Official Notice is taken that control systems on automobile are well known, as seen in Guenther (US 5,086,510), figure 4, for the benefit of better visibility of controls for the user.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include mount controls on an automobile steering wheel and link it to the controller, as disclosed in Guenther ('510) for the benefit of better visibility of the controls for the user.

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Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include mount controls on an automobile steering wheel and link it to the controller, as disclosed in Guenther ('510), since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

As per Claim 51.

The combination of De Bay, Schwob, Yoshio, Browne and Kirkland does not explicitly teach a hierarchy for the database.

Official Notice is taken that hierarchical databases are old and well known, as taught by Date "An introduction to Database Systems" in the database arts for structured storage.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to create a hierarchical database as an old and well known method of structuring a database.

As per Claim 53.

Kirkland discloses the use of encoded videotape for storing programs in TV broadcasting, thereby suggesting utilizing digital audio tape.

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Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include utilizing digital audio tape or any other standard media for recording for the benefit of maximizing public acceptance of the product.

As per Claim 57.

The combination of De Bay, Schwob, Yoshio, Browne and Kirkland does not disclose a speed of transmission of the data in the broadcast signal is varied to most efficiently use the available bandwidth.

Official Notice is taken that it is old and well known in the network arts to vary transmission speeds to most efficiently use the available bandwidth.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to vary the transmission of the broadcast signal to most efficiently use the available bandwidth.

1.3 Claim 62 is rejected under 35 U.S.C. 103(a) as being unpatentable over De Bey in view of Schwob further in view of Yoshio, further in view of Browne, further in view of Kirkland and further in view of Wysong (US 3,922,607).

As per Claim 62.

De Bey ('112) discloses:

a tuner for receiving a broadcast signal, see figure 2 (40) and page 10 lines 26-30 and page 11, lines 4-5;

a memory coupled to the tuner for storing data in the received broadcast signal in a database, see figure 2 (42, 42). Browne teaches receiving and storing in the memory updates of the data (page 7, line 14 – page 8, line 14).

The combination of De Bey, Schwob, Yoshio, Browne and Kirkland does not explicitly teach that said receiver receives said program continuously.

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Wysong discloses a radio broadcasting system including a transmitter, which transmits a substantially continuous program, and a receiver for receiving the continuous program (Abstract).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination to include that said receiver continuously receives said program, as disclosed in Wysong, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

1.4 Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over De Bey in view of Schwob further in view of Yoshio, further in view of Browne, further in view of Kirkland further in view of Wysong and further in view of Method for Multimedia Non-repudiation in Computer Networks; IBM Technical Disclosure Bulletin, April 1992; NN9204297 (NN9204297).

As per Claim 63.

The combination of De Bey, Schwob, Yoshio, Browne, Kirkland and Wysong teaches all limitations of claim 63, except that received items of data

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include a data stamp to indicate currency of the data, which is disclosed in NN9204297 (page 1, line 18).

In this case, each of the elements of the cited references combined by the Examiner performs the same function when combined as it does in the prior art. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include that received items of data include a data stamp thereby to indicate currency of the data, as disclosed in NN9204297, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

1.5 Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over De Bey in view of Schwob further in view of Yoshio, further in view of Browne, further in view of Kirkland and further in view of Myers et al.

As per Claim 64.

The combination of De Bey, Schwob, Yoshio, Browne and Kirkland teaches all limitations of claim 64, except that the receiver is adapted to disable itself upon receipt of a command received via the tuner.

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Myers et al. (Myers) teaches an authorization code lockout mechanism for preventing unauthorized reception of transmitted data, wherein a valid receiver is adapted to receive an addressed transaction which gives the receiver the current "authorization code". After this command has been sent to the receiver, a global transaction is sent to the receiver containing the current and previous authorization codes. If the receiver receiving this transaction does not find a match between its stored authorization code and either of the transmitted authorization codes, it will disable itself (C. 2, L. 25-40).

In this case, each of the elements of the cited references combined by the Examiner performs the same function when combined as it does in the prior art. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include that the receiver is adapted to disable itself upon receipt of a command received via the tuner, as disclosed in Myers, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

1.6 Claims 91 and 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Bey in view of Schwob further in view of Yoshio, further in view of Browne, further in view of Wysong and further in view of Kirkland.

As per Claims 91.

De Bey ('112) discloses:

a tuner that receives a broadcast signal, see Fig. 2 (40) and page 10 lines 26-30 and page 11, lines 4-5;

a memory coupled to the tuner for storing data in the received broadcast signal in a database, see Fig. 2 (42, 42);

a processor, coupled to the tuner and the memory, the processor processes the received broadcast signal including data, stores the data as a database in a memory, provides a user interface for selecting data in the database, provides the selected data in digital form and converts the selected data from digital form to an analog signal, provides a user interface for interacting with the database, see Fig. 2 (keypad 54, TV 44 provides user input to select program stored in memories 42, 46);

the processor is configured to provide the user interface for selecting data from the database in response to the accepted selections and providing the selected data in a digital form, see Fig. 2 (52) and page 9, lines 10-11, page 19, lines 32-33;

a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal, see page 8, line 4), wherein receiving, processing and viewing broadcasted TV program, including visual and audible information, suggests the use of an audio amplifier (page 1, lines 15-16), wherein the processor controls operation of analog and digital signals.

Schwob ('011) disclose a broadcast receiver including an audio amplifier and speakers for reproducing a recorded broadcasted signal, Fig. 1 (26), said

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receiver is configured for automatically updating its database (Abstract; C. 8, L. 5-10). Schwob further discloses a user interface having user input means for interaction with a receiver, including buttons corresponding to various type of programming, including news, classical music, jazz, etc., and means for presenting selected information in succession to the user (Fig. 5, "200"). In use, the user, by repeatedly pressing appropriate buttons interacts with receiver database for selecting appropriate information for desired geographical region (C. 10, L. 40-65; C. 11, L. 20-45).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify De Bey to include the recited limitations, as taught by Schwob ('011), for the benefit of amplifying signals sent to speakers, and to include the "updating" feature, as disclosed in Schwob, for the benefit of eliminating the need to replace the ROM too often, as specifically stated in Schwob.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify De Bey to include the recited limitations, as taught by Schwob ('011), since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

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While the combination of De Bey and Schwob teaches that the user interface is configured to enable an access to the program stored in the database, provide the user with information based on user's input, and accept selections from the provided information, the combination does not explicitly teach that said succession or set of presented information includes a set of *menus* describing the database.

Yoshio et al ('631) (Yoshio) discloses:

a tuner for receiving a broadcast signal,

a memory coupled to the tuner for storing data in the received broadcast signal in a database,

a user interface for providing a set of *menus describing the database, and for accepting selections from the set of menus*, see page 25, [0009] line 5; [0010] line 6; page 27, [0013]; Page 28, [0015].

Further, said set of menus is disclosed in Browne et al. (Browne), which teaches a receiver adapted to receive data contained in a transmitted broadcast signal comprising:

a tuner that receives a broadcast signal, (Fig. 7, item 702; page 9, lines 20-24);

a memory coupled to the tuner for storing data in the received broadcast signal in a database, (Fig. 1, item 104);

a processor, coupled to the tuner and the memory, the processor processes the received broadcast signal including data, stores the data as a database in a memory, provides a user interface for providing a set of menus describing the database, and for accepting selections from the set of menus (Fig. 1, item 105a; page 13, lines 11 - page 14, line 8);

for selecting data from the database in response to the accepted selections and providing the selected data in a digital form (Fig. 1, items 104, 105, 105a; page 13, lines 18- page 14, line 8); and

a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal (Fig. 1, item

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110; page 15, lines 7-13), wherein the processor controls operation of analog and digital signals.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of De Bey and Schwob to include that the user interface provides *a set of menus describing the database, and accepts selections from the set of menus*, as disclosed in Yoshio and Browne, because it would advantageously allow to organize the programs by the interest or designate the programs by a reference point, thereby permitting the user to select the desired channel quickly without memorizing the program code, as specifically stated in Yoshio.

Alternatively, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of De Bey and Schwob to include the recited limitations, as disclosed in Yoshio and Browne, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

The combination of De Bey, Schwob, and Yoshio, Browne does not explicitly teach that said receiver receives said program continuously.

Wysong discloses a radio broadcasting system including a transmitter, which transmits a substantially continuous program, and a receiver for receiving the continuous program (Abstract).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination to include that said receiver continuously receives said program, as disclosed in Wysong, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

The combination of De Bey, Schwob, Yoshio, Browne and Wysong does not specifically teach a switch that provides the data to the speech synthesizer or the audio amplifier, wherein, if the data is the alphanumeric data, the switch provides the alphanumeric data to the speech synthesizer and, if the data is the audio data, the switch provides the audio data to the audio amplifier, which is disclosed in Kirkland (Fig. 1, "105" acts as a switch; separates incoming data to text-to-speech processing "106" or audio processing "audio" output to "108"; Fig. 2, note the amplifier "203"; C. 6, L. 29-46; C. 7, L. 13-28).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination of De Bey, Schwob Yoshio, and Browne to include the recited limitations, as disclosed in Kirkland, because it

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would advantageously allow transmission services via channels for which there is less competition, and whereby the descriptions may be provided in stereo, as specifically stated in Kirkland (C. 2, L. 19-22).

Alternatively, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination of De Bey, Schwob, Yoshio, and Browne to include the recited limitations, as disclosed in Kirkland, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

As per claim 92. The receiver according to claim 1, wherein the broadcast signal is transmitted by a source not in response to a request from the receiver (Same reasoning as applied to claim 1).

2.1 Claims 1, 33-37, 49, 52, 54-56, and 58-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang (5,057,932) in view of Schwob further in view of Yoshio, further in view of Browne, and further in view of Kirkland.

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As per Claims 1 and 58.

Lang ('932) discloses:

a tuner that receives a broadcast signal, see figure 3 and column 11, lines 9-40;

a memory coupled to the tuner for storing data in the received broadcast signal in a database, see figure 3, (13), column 8, lines 38-50 and column 11, line 30;

a processor, coupled to the tuner and the memory, the processor processes the received broadcast signal including data, stores the data as a database in a memory, provides a user interface for selecting data in the database, provides the selected data in digital form and converts the selected data from digital form to an analog signal, provides a user interface for interacting with the database, the processor is configured to provide the user interface for selecting data from the database in response to the accepted selections and providing the selected data in a digital form, Fig. 3 (12), (14); column 6, line 53, column 11, lines 3240 and column 8, lines 27-33;

a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal, Fig. 3, (12). wherein receiving, processing and viewing broadcasted TV program, including visual and audible information, suggests the use of an audio amplifier (page 1, lines 15-16), wherein the processor controls operation of analog and digital signals.

Lang discloses receiving audio program, and teaches the use of speakers for reproducing said audio programs, thereby suggesting an audio amplifier.

Schwob ('011) disclose a broadcast receiver including an audio amplifier and speakers for reproducing a recorded broadcasted signal, Fig. 1 (26), said receiver is configured for automatically updating its database (Abstract; C. 8, L. 5-10). Schwob further discloses a user interface having user input means for interaction with a receiver, including buttons corresponding to various type of

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programming, including news, classical music, jazz, etc., and means for presenting selected information in succession to the user (Fig. 5, "200"). In use, the user, by repeatedly pressing appropriate buttons interacts with receiver database for selecting appropriate information for desired geographical region (C. 10, L. 40-65; C. 11, L. 20-45).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify Lang to include the recited limitations, as taught by Schwob ('011), for the benefit of amplifying signals sent to speakers, and for the benefit of eliminating the need to replace the ROM too often, as specifically stated in Schwob.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify Lang to include an amplifier, as taught by Schwob ('011), since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

While Lang teaches that the user interface allows the user to select a desired frame number from the menu (C. 6, L. 40-42), the combination of Lang and Schwob does not explicitly teach that said succession or set of presented information includes a set of *menus* describing the database.

Yoshio et al ('631) discloses:

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a tuner for receiving a broadcast signal, see page 23, line 12;

a memory coupled to the tuner for storing data in the received broadcast signal in a database, see page 23, line 13;

a user interface for providing a set of *menus describing the database, and for accepting selections from the set of menus*, see page 23, line 25; Page 28, [0015];

a controller coupled to the memory and the user interface for selecting data from the database in response to the accepted selections and providing the selected data in a digital form, see page 25, lines 24-25;

a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal, see page 23, lines 21-23.

Further, said set of menus is disclosed in Browne, which teaches a receiver adapted to receive data contained in a transmitted broadcast signal comprising:

a tuner that receives a broadcast signal, (Fig. 7, item 702; page 9, lines 20-24);

a memory coupled to the tuner for storing data in the received broadcast signal in a database, (Fig. 1, item 104);

a processor, coupled to the tuner and the memory, the processor processes the received broadcast signal including data, stores the data as a database in a memory, provides a user interface for providing a set of menus describing the database, and for accepting selections from the set of menus (Fig. 1, item 105a; page 13, lines 11 - page 14, line 8);

for selecting data from the database in response to the accepted selections and providing the selected data in a digital form (Fig. 1, items 104, 105, 105a; page 13, lines 18- page 14, line 8); and

a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal (Fig. 1, item

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110; page 15, lines 7-13), wherein the processor controls operation of analog and digital signals.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of Lang and Schwob to include that the user interface provides *a set of menus describing the database, and accepts selections from the set of menus*, as disclosed in Yoshio and Browne, because it would advantageously allow to organize the programs by the interest by structuring them into a plurality of hierarchies such as children menus or grandchildren menus (Yoshio, page 23, line 25 – page 24, line 1), thereby allowing the user to select the desired channel at a glance without memorizing the program code.

Alternatively, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of Lang and Schwob to include that the user interface provides *a set of menus describing the database, and accepts selections from the set of menus*, as disclosed in Yoshio and Browne, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

The combination of Lang, Schwob, Yoshio, and Browne does not specifically teach a switch that provides the data to the speech synthesizer or the

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audio amplifier, wherein, if the data is the alphanumeric data, the switch provides the alphanumeric data to the speech synthesizer and, if the data is the audio data, the switch provides the audio data to the audio amplifier, which is disclosed in Kirkland (Fig. 1, "105" acts as a switch; separates incoming data to text-to-speech processing "106" or audio processing "audio" output to "108"; Fig. 2, note the amplifier "203"; C. 6, L. 29-46; C. 7, L. 13-28).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination of Lang, Schwob, Yoshio, and Browne to include the recited limitations, as disclosed in Kirkland, because it would advantageously allow transmission services via channels for which there is less competition, and whereby the descriptions may be provided in stereo, as specifically stated in Kirkland (C. 2, L. 19-22).

Alternatively, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination of Lang, Schwob, Yoshio, and Browne to include the recited limitations, as disclosed in Kirkland, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

As per Claim 33.

Lang ('932) further discloses the memory stores the entire database, see column 8, lines 27-33.

As per Claim 34.

Lang ('932) further discloses the memory comprises a combination of volatile RAM and non-volatile memory, see figure 3 (13, 14).

As per Claim 35.

Lang ('932) further discloses non-volatile memories such as ROM, see figure 3 (14).

As per Claim 36.

Lang ('932) further discloses the received audio data has been converted from analog form to digital form, see figure 3 (A/D, D/A) and column 5, lines 51-53.

As per Claim 37.

Lang ('932) further discloses the received audio data is digitized and has been compressed, see figure 3 (ND, D/A) and column 3, line 51 - column 5, line 50.

As per Claim 49.

Lang ('932) further discloses an amplifier connected to the speech producing sub-system for amplifying the analog signal, see column 11, lines 60-63.

As per Claim 52.

Lang ('932) further discloses a memory stores the data received in a random access memory up to the capacity of the random access memory before transferring said data to one of a disk medium or a tape medium, see column 9, lines 38-56.

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As per Claim 54.

Lang ('932) further discloses disk medium is a magnetic disk, see column 6, line 28-39.

As per Claim 55.

Lang ('932) further discloses disk medium is a magnetic-optical disk, see column 6, line 28-39.

As per Claim 56.

Lang ('932) further discloses disk medium is an optical disk, see column 6, line 28-39.

As per Claim 59.

Lang ('932) further discloses the received information is transmitted by a broadcast signal, see figure 3.

As per Claim 60, 61.

Yoshio et al ('631) further discloses that the broadcasted data which the tuner is adapted to record includes the at least one entire program, such as news or English courses, see page 26, lines 14-20. The motivation to combine the references would be to provide convenience to the user to listen uninterrupted program. Alternatively, it is noted that claims 60, 61 do not provide any indication/limitations of the volume of data to be received or memory capacity of the device. As such, the content of the received and stored data cannot affect the fact that the data has been stored, regardless is it the at least one entire program, a portion of the program, or a set of programs.

2.2 Claims 38, and 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang in view of Schwob, further in view of Yoshio, further in view of Browne, further in view of Kirkland and further in view of Rovira (WO 92/10040).

As per Claim 38.

The combination of Lang, Schwob, Yoshio, Browne and Kirkland does not explicitly teach that the received audio data has been encrypted.

Rovira ('040) teaches conversion, compression and encryption of data are well known for the benefit of increased speed and security of data transmission, see page 12, lines 5-16.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include digitizing and encrypting the data transmission, as disclosed in Rovira, for the benefit of increased security of data transmission.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include digitizing and encrypting the data transmission, as disclosed in Rovira, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

As per Claim 41.

The combination of Lang, Schwob, Yoshio, Browne and Kirkland does not explicitly teach disclose a decryptor for decrypting the data.

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Rovira ('040) teaches conversion, compression and encryption of data are well known for the benefit of increased speed and security of data transmission, see page 12, lines 5-16 and further a decryptor for decrypting, see page 14, lines 7-12 for the benefit of reversing the encryption, compression and conversion of the broadcast data.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include a decryptor for decrypting the data transmission, as disclosed in Rovira, for the benefit of reversing the encryption, compression and conversion of the broadcast data.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include a decryptor for decrypting the data transmission, as disclosed in Rovira, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

As per Claim 42.

Same rationale as applied to claim 41.

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2.3 Claims 39-40, 45-48, 50-51, 53, and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang in view of Schwob, further in view of Yoshio, further in view of Browne, further in view of Kirkland and further in view of in view of Official Notice.

As per Claim 39.

The combination of Lang, Schwob, Yoshio, Browne and Kirkland teaches an analog to digital and digital to analog converters are old and well known, see Fig. 3 (24, 25). Further, while Kirkland teaches that the received data is alphanumeric data, the combination does not explicitly teach that said data has been converted from analog to digital form.

Official Notice is taken that it is old and well known to convert data from analog to digital, further Atkinson "VCR programming: Making life easier using bar codes" and further Bensch "VPV – Videotext programs videorecorder" teaches use of alphanumerics in VCRs, for the benefit of making VCRs easier to set.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include converting alphanumeric data to digital form for the benefit of easier setting of the VCR.

As per Claim 40.

Kirkland teaches that the received data is alphanumeric data which is converted to voice data by a speech synthesizer. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

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As per Claim 45.

The combination of Lang, Schwob, Yoshio, Browne and Kirkland does not disclose the user interface is voice activated.

Official Notice is taken that speech recognition is old and well known as shown in Takahashi (US 4,682,368), column 2, lines 11-60 for the benefit of hands free operation of the device.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include a voice activated user interface, as taught by Takahashi (4,682,368), for the benefit of hands free operation of the device.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include a voice activated user interface, as taught by Takahashi, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

As per Claim 46.

While Yosio teaches that the playback device is mounted on a vehicle (page 28, [0014] line 7), the combination of Lang, Schwob, Yoshio, Browne and Kirkland does not disclose:

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a manual input device adapted to be mountable on an automobile steering wheel; and a link from the manual input device to the controller.

Official Notice is taken that control systems on automobile steering wheels are well known, as seen in Guenther et al (US 5,086,510) Fig. 4, for the benefit of better visibility of controls for the user.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include mounting controls on an automobile steering wheel and linking it to the controller, as disclosed in Guenther, for the benefit of better visibility of the controls for the user.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include mounting controls on an automobile steering wheel and linking it to the controller, as disclosed in Guenther, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

As per Claim 47.

The combination of Lang, Schwob, Yoshio, Browne and Kirkland does not disclose a control for determining the speed at which the speech output

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device outputs the analog signal.

Official notice is taken that it is old and well known to determine the speed at which the speech device output the output signal as can be seen in Benbassat et al (US 4,700,322) column 1, lines 28-50 for the benefit of synchronizing speech with the visualization of messages.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include determining the speed at which the speech device output the output signal, as taught by Benbassat et al (US 4,700,322) for the benefit of synchronizing speech with the visualization of messages.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include determining the speed at which the speech device output the output signal, as taught by Benbassat, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

As per Claim 48.

The combination of Lang, Schwob, Yoshio, Browne and Kirkland does not disclose the tuner channel skips to tune to a particular transmitter.

Official Notice is taken that it is old and well known to skip channels to get

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to the desired transmitter, as seen in Whitby et al (GB 2 258 102) page 6, lines 13-21 for the benefit of presetting the device to access a specific transmitter.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include to skip channels to get to the desired transmitter, as taught by Whitby et al (GB 2 258 102) for the benefit of presetting the device to access a specific transmitter.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include to skip channels to get to the desired transmitter, as taught by Whitby, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

As per Claim 50.

While Yosio teaches that the playback device is mounted on a vehicle (page 28, [0014] line 7), the combination of Lang, Schwob, Yoshio, Browne and Kirkland does not disclose connecting the receiving system to an automobile radio set.

Official Notice is taken that control systems on automobile are well known, as seen in Guenther et al (US 5,086,510) figure 4, for the benefit of

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better visibility of controls for the user.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include mount controls on an automobile steering wheel and link it to the controller, as disclosed in Guenther for the benefit of better visibility of the controls for the user.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include mount controls on an automobile steering wheel and link it to the controller, as disclosed in Guenther, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

As per Claim 51.

The combination of Lang, Schwob, Yoshio, Browne and Kirkland does not explicitly teach a hierarchy for the database.

Official Notice is taken that hierarchical databases are old and well known, as taught by Date "An introduction to Database Systems" in the database arts for structured storage.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to create a

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hierarchical database as an old and well known method of structuring a database.

As per Claim 53.

Kirkland discloses the use of encoded videotape for storing programs in TV broadcasting, thereby suggesting utilizing digital audio tape.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include utilizing digital audio tape or any other standard media for recording for the benefit of maximizing public acceptance of the product.

As per Claim 57.

The combination of Lang, Schwob, Yoshio, Browne and Kirkland does not disclose a speed of transmission of the data in the broadcast signal is varied to most efficiently use the available bandwidth.

Official Notice is taken that it is old and well known in the network arts to vary transmission speeds to most efficiently use the available bandwidth.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include varying the transmission of the broadcast signal to most efficiently use the available bandwidth.

2.4 Claims 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang in view of Schwob, further in view of Yoshio, further in view of Browne, further in view of Kirkland, further in view of Rovira and further in view of De Bey ('112).

As per Claim 43.

The combination of Lang, Schwob, Yoshio, Browne, Kirkland, and Rovira does not disclose a key for decrypting the data.

De Bey ('112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1, for the benefit

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of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include decrypting the data transmission, as disclosed in De Bey, for the benefit of increased security of data transmission.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include decrypting the data transmission, as disclosed in De Bey, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

As per Claim 44.

The combination of Lang, Schwob, Yoshio, Browne, Kirkland, and Rovira does not disclose a key for decrypting the data.

De Bey ('112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1, states that the key can be included as a prefix to the data packet received by the receiver 40, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the

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art, at the time the invention was made to modify the combination to include a key for decrypting the data, as disclosed in De Bey, for the benefit of increased security of data transmission.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include a key for decrypting the data, as disclosed in De Bey, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

2.5 Claim 62 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lang in view of Schwob, further in view of Yoshio, further in view of Browne, further in view of Kirkland and further in view of Wysong (US 3,922,607).

As per Claim 62.

The combination of Lang, Schwob, Yoshio, Browne, and Kirkland does not explicitly teach that said receiver receives said program continuously.

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Wysong discloses a radio broadcasting system including a transmitter, which transmits a substantially continuous program, and a receiver for receiving the continuous program (Abstract).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination to include that said receiver continuously receives said program, as disclosed in Wysong, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

2.6 Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lang in view of Schwob, further in view of Yoshio, further in view of Browne, further in view of Kirkland, further in view of Wysong and further in view of Method for Multimedia Non-repudiation in Computer Networks; IBM Technical Disclosure Bulletin, April 1992; NN9204297 (NN9204297).

As per Claim 63.

The combination of Lang, Schwob, Yoshio, Browne, and Kirkland teaches all the limitations of claim 63, except that received items of data include a data

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stamp to indicate currency of the data, which is disclosed in NN9204297 (page 1, line 18).

In this case, each of the elements of the cited references combined by the Examiner performs the same function when combined as it does in the prior art. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include that received items of data include a data stamp thereby to indicate currency of the data, as disclosed in NN9204297, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

2.7 Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lang in view of Schwob, further in view of Yoshio, further in view of Browne, further in view of Kirkland and further in view of Myers et al.

As per Claim 64.

The combination of Lang, Schwob, Yoshio, Browne, and Kirkland teaches all limitations of claim 64, except that the receiver is adapted to disable itself upon receipt of a command received via the tuner.

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Myers teaches an authorization code lockout mechanism for preventing unauthorized reception of transmitted data, wherein a valid receiver is adapted to receive an addressed transaction which gives the receiver the current "authorization code". After this command has been sent to the receiver, a global transaction is sent to the receiver containing the current and previous authorization codes. If the receiver receiving this transaction does not find a match between its stored authorization code and either of the transmitted authorization codes, it will disable itself (C. 2, L. 25-40).

In this case, each of the elements of the cited references combined by the Examiner performs the same function when combined as it does in the prior art. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include that the receiver is adapted to disable itself upon receipt of a command received via the tuner, as disclosed in Myers, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

2.8. Claims 91 and 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang in view of Schwob, further in view of Yoshio,

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further in view of Browne, further in view of Wysong and further in view of Kirkland.

As per Claim 91.

Lang ('932) discloses:

a tuner that receives a broadcast signal, see figure 3 and column 11, lines 9-40;

a memory coupled to the tuner for storing data in the received broadcast signal in a database, see figure 3, (13), column 8, lines 38-50 and column 11, line 30;

a processor, coupled to the tuner and the memory, the processor processes the received broadcast signal including data, stores the data as a database in a memory, provides a user interface for selecting data in the database, provides the selected data in digital form and converts the selected data from digital form to an analog signal, provides a user interface for interacting with the database, the processor is configured to provide the user interface for selecting data from the database in response to the accepted selections and providing the selected data in a digital form, Fig. 3 (12), (14); column 6, line 53, column 11, lines 3240 and column 8, lines 27-33;

a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal, Fig. 3, (12). wherein receiving, processing and viewing broadcasted TV program, including visual and audible information, suggests the use of an audio amplifier (page 1, lines 15-16), wherein the processor controls operation of analog and digital signals.

Lang discloses receiving audio program, and teaches the use of speakers for reproducing said audio programs, thereby suggesting an audio amplifier.

Schwob ('011) disclose a broadcast receiver including an audio amplifier and speakers for reproducing a recorded broadcasted signal, Fig. 1 (26), said

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receiver is configured for automatically updating its database (Abstract; C. 8, L. 5-10). Schwob further discloses a user interface having user input means for interaction with a receiver, including buttons corresponding to various type of programming, including news, classical music, jazz, etc., and means for presenting selected information in succession to the user (Fig. 5, "200"). In use, the user, by repeatedly pressing appropriate buttons interacts with receiver database for selecting appropriate information for desired geographical region (C. 10, L. 40-65; C. 11, L. 20-45).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify De Bey to include the recited limitations, as taught by Schwob ('011), for the benefit of amplifying signals sent to speakers, and to include the "updating" feature, as disclosed in Schwob, for the benefit of eliminating the need to replace the ROM too often, as specifically stated in Schwob.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify De Bey to include the recited limitations, as taught by Schwob ('011), since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

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While the combination of Lang and Schwob teaches that the user interface is configured to enable an access to the program stored in the database, provide the user with information based on user's input, and accept selections from the provided information, the combination does not explicitly teach that said succession or set of presented information includes a set of *menus* describing the database.

Yoshio et al ('631) discloses:

a tuner for receiving a broadcast signal, see page 23, line 12;

a memory coupled to the tuner for storing data in the received broadcast signal in a database, see page 23, line 13;

a user interface for providing a set of *menus describing the database, and for accepting selections from the set of menus*, see page 23, line 25; Page 28, [0015];

a controller coupled to the memory and the user interface for selecting data from the database in response to the accepted selections and providing the selected data in a digital form, see page 25, lines 24-25;

a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal, see page 23, lines 21-23.

Further, said set of menus is disclosed in Browne, which teaches a receiver adapted to receive data contained in a transmitted broadcast signal comprising:

a tuner that receives a broadcast signal, (Fig. 7, item 702; page 9, lines 20-24);

a memory coupled to the tuner for storing data in the received broadcast signal in a database, (Fig. 1, item 104);

a processor, coupled to the tuner and the memory, the processor processes the received broadcast signal including data, stores the data as a database in a memory, provides a user interface for providing a set of menus

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describing the database, and for accepting selections from the set of menus (Fig. 1, item 105a; page 13, lines 11 - page 14, line 8);

for selecting data from the database in response to the accepted selections and providing the selected data in a digital form (Fig. 1, items 104, 105, 105a; page 13, lines 18- page 14, line 8); and

a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal (Fig. 1, item 110; page 15, lines 7-13), wherein the processor controls operation of analog and digital signals.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of Lang and Schwob to include the recited limitations, as disclosed in Yoshio and Browne, because it would advantageously allow to organize the programs by the interest by structuring them into a plurality of hierarchies such as children menus or grandchildren menus (Yoshio, page 23, line 25 – page 24, line 1), thereby allowing the user to select the desired channel at a glance without memorizing the program code.

Alternatively, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combination of Lang and Schwob to include that the user interface provides *a set of menus describing the database, and accepts selections from the set of menus*, as disclosed in Yoshio and Browne, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82

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USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

The combination of Lang, Schwob, Yoshio, and Browne does not explicitly teach that said receiver receives said program continuously.

Wysong discloses a radio broadcasting system including a transmitter, which transmits a substantially continuous program, and a receiver for receiving the continuous program (Abstract).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination to include that said receiver continuously receives said program, as disclosed in Wysong, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

The combination of Lang, Schwob, Yoshio, Browne and Wysong does not specifically teach a switch that provides the data to the speech synthesizer or the audio amplifier, wherein, if the data is the alphanumeric data, the switch provides the alphanumeric data to the speech synthesizer and, if the data is the audio data, the switch provides the audio data to the audio amplifier, which is disclosed

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in Kirkland (Fig. 1, "105" acts as a switch; separates incoming data to text-to-speech processing "106" or audio processing "audio" output to "108"; Fig. 2, note the amplifier "203"; C. 6, L. 29-46; C. 7, L. 13-28).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination of De Bey, Schwob, Yoshio, Browne and Wysong to include the recited limitations, as disclosed in Kirkland, because it would advantageously allow transmission services via channels for which there is less competition, and whereby the descriptions may be provided in stereo, as specifically stated in Kirkland (C. 2, L. 19-22).

Alternatively, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination of De Bey, Schwob, Yoshio, Browne and Wysong to include the recited limitations, as disclosed in Kirkland, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

As per Claim 92. The receiver according to claim 1, wherein the broadcast signal is transmitted by a source not in response to a request from the receiver (Same reasoning as applied to claim 1).

3.1 Claims 1, 33-37, 45, 49, and 58-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Browne et al. (WO 92/22983) in view of Schwob and further in view of Kirkland.

Browne et al. (Browne) teaches:

Claims 1 and 58: A receiver adapted to receive data contained in a transmitted broadcast signal comprising:

a tuner that receives a broadcast signal, (Fig. 7, item 702; page 9, lines 20-24);

a memory coupled to the tuner for storing data in the received broadcast signal in a database, (Fig. 1, item 104);

a processor, coupled to the tuner and the memory, the processor processes the received broadcast signal including data, stores the data as a database in a memory, provides a user interface for providing a set of menus describing the database, and for accepting selections from the set of menus (Fig. 1, item 105a; page 13, lines 11 - page 14, line 8);

for selecting data from the database in response to the accepted selections and providing the selected data in a digital form (Fig. 1, items 104, 105, 105a; page 13, lines 18- page 14, line 8); and

a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal (Fig. 1, item 110; page 15, lines 7-13), wherein the processor controls operation of analog and digital signals.

Browne does not explicitly teach that received data includes updated data, and that said data, stored in the database, includes said received updated data (updating the database with the second data in response to receiving the second data).

However, Browne teaches upon receiving new data in the memory, deleting/overwriting the old one (page 7, line 14 – page 8, line 14), thereby

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suggesting said feature. Further, Browne teaches the use of stereo audio outputs for listening programs on television sets, thereby suggesting the use of an audio amplifier.

Schwob ('011) disclose a broadcast receiver including an audio amplifier and speakers for reproducing a recorded broadcasted signal, Fig. 1 (26), said receiver is configured for automatically updating its database (Abstract; C. 8, L. 5-10). Schwob further discloses a user interface having user input means for interaction with a receiver, including buttons corresponding to various type of programming, including news, classical music, jazz, etc., and means for presenting selected information in succession to the user (Fig. 5, "200"). In use, the user, by repeatedly pressing appropriate buttons interacts with receiver database for selecting appropriate information for desired geographical region (C. 10, L. 40-65; C. 11, L. 20-45).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify Browne to include the recited limitations, as disclosed in Schwob, for the benefit of eliminating the need to replace the ROM too often, as specifically stated in Schwob.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify Browne to include the recited limitations, as taught by Schwob ('011), since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement

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Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

The combination of Browne and Schwob does not specifically teach a switch that provides the data to the speech synthesizer or the audio amplifier, wherein, if the data is the alphanumeric data, the switch provides the alphanumeric data to the speech synthesizer and, if the data is the audio data, the switch provides the audio data to the audio amplifier, which is disclosed in Kirkland (Fig. 1, "105" acts as a switch; separates incoming data to text-to-speech processing "106" or audio processing "audio" output to "108"; Fig. 2, note the amplifier "203"; C. 6, L. 29-46; C. 7, L. 13-28).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination of Browne and Schwob to include the recited limitations, as disclosed in Kirkland, because it would advantageously allow transmission services via channels for which there is less competition, and whereby the descriptions may be provided in stereo, as specifically stated in Kirkland (C. 2, L. 19-22).

Alternatively, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination of Browne and Schwob to include the recited limitations, as disclosed in Kirkland, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v.

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Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

Browne further teaches:

Claim 33: The receiver of Claim 1, wherein the memory stores the entire database (page 14, lines 3-7).

Claim 34: The receiver of Claim 1, wherein the memory comprises a combination of a volatile RAM memory and a non-volatile memory (page 10, line 30 - page 11, line 11).

Claim 35: The receiver of Claim 34, wherein the non-volatile memory is selected from the group consisting of an audio tape, a magneto-optical mini-disk, a magnetic disk or an optical disk (page 10, line 30 - page 11, line 3).

Claim 36: The receiver of Claim 1, wherein the received data is audio data that has been converted from analog form to digital form (Fig. 1, item 102; page 10, lines 4-8).

Claim 37: The receiver of Claim 36, wherein the received audio data is digitized and has been compressed (Fig. 1, items 102, 103; page 10, lines 4-8, 13-20).

Claim 45: The receiver of Claim 1, wherein the user interface is voice activated (page 30, line 28 - page 31, line 23).

Claim 49: The receiver of Claim 1, further comprising:

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an amplifier connected to the speech producing sub-system for amplifying the analog signal; and means for converting the amplified signal to sound (page 15, lines 9-13).

Claim 59: The method of Claim 58, wherein the received information is transmitted by a broadcast signal (page 9, lines 20-24).

Claim 60: The receiver of Claim 1, wherein the memory is sufficient to store data representing the content of at least one entire program (page 8, lines 1-14).

Claim 61: The method of Claim 58, wherein the stored information includes the content of at least one entire program (page 8, lines 1-14).

3.2 Claims 38, 41-44, 52-54 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Browne in view of Schwob, further in view of Kirkland and further in view of De Bey (WO 99/03112).

Claim 38: The combination of Browne, Schwob and Kirkland teaches all limitations of claim 38, except that the received audio data has been encrypted.

De Bey ('112) teaches the received audio data is encrypted, see page 11, lines 30-38, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include encrypting the data transmission, as disclosed in De Bey, for the benefit of increased security of data transmission.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include encrypting the data transmission, as disclosed in De Bey, since the claimed invention is merely a combination of old elements, and in the combination each

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element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

Claims 41.

The combination of Browne, Schwob and Kirkland does not disclose a decryptor for decrypting the data.

De Bey ('112) teaches data encrypted, see page 11, lines 30-31, and compressed, see page 11, line 12, and further comprising a decryptor for decrypting, see page 11, lines 31-32 for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include a decryptor for decrypting the data transmission, as disclosed in De Bey ('112), for the benefit of increased security of data transmission.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include a decryptor for decrypting the data transmission, as disclosed in De Bey, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the

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results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

Claim 42.

The combination of Browne, Schwob and Kirkland does not disclose that said system has a decompression algorithm to decompress data that has been compressed at a transmitter prior to being broadcast.

De Bey ('112) further discloses a decompression algorithm to decompress data that has been compressed at a transmitter prior to being broadcast, see figure 2 (40, 50), and page 111, lines 12-15, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include decrypting the data transmission as disclosed in De Bey ('112), for the benefit of increased security of data transmission.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify Browne to include decrypting the data transmission as disclosed in De Bey, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been

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obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

Claim 43.

The combination of Browne, Schwob and Kirkland does not disclose a key for decrypting the data.

De Bey ('112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include providing a key for decrypting the data transmission, as disclosed in De Bey ('112), for the benefit of increased security of data transmission.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include providing a key for decrypting the data transmission, as disclosed in De Bey, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to

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one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

As per Claim 44.

The combination of Browne, Schwob and Kirkland does not disclose a key (device) for decrypting the data.

De Bey ('112) further discloses the decryptor is enabled by a key received by the tuner, see page 11, lines 31-33, 35-38 and page 12, line 1, states that the key can be included as a prefix to the data packet received by the receiver 40, for the benefit of increased security of data transmission.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include a key (device) for decrypting the data, as disclosed in De Bey ('112), for the benefit of increased security of data transmission.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include a key (device) for decrypting the data, as disclosed in De Bey, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great

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Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

Claim 52. De Bey ('112) teaches the memory stores the data received in a random access memory up to the capacity of the random access memory before transmitting said data to one of a disk medium or tape medium, see page 7, lines 23-25 for the benefit of storing the data without exceeding ram buffer capacity.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include storing data received in a random access memory up to the capacity of the random access memory before transmitting said data to a disk medium, as taught by De Bey ('112), for the benefit of storing the data without exceeding ram buffer capacity.

Claim 53: The receiver of Claim 52, wherein the tape medium is a digital audio tape (Browne, page 11, line 2).

Claim 54: The receiver of Claim 52, wherein the disk medium is a magnetic disk (Browne, page 1).

Claim 56: The receiver of Claim 52, wherein the disk medium is an optical disk (Browne, page 11, line 1-2).

3.3 Claims 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Browne in view of Schwob further in view of Kirkland, further in view of De Bey and further in view of in view of Official Notice.

Claim 39: Kirkland teaches alphanumeric data and. Further, Official Notice is taken that it is old and well know to convert data from analog to digital,

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the type of data does not matter, further Atkinson "VCR programming: Making life easier using bar codes" and further Bensch "VPV – Videotext programs videorecorder" teaches use of alpha numerics in vcrs, for the benefit of making vcrs easier to set.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include converting alphanumeric data to digital form for the benefit of easier setting of the vcr.

As per Claim 40.

Kirkland teaches that the received data is alphanumeric data which is converted to voice data by a speech synthesizer. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

3.4 Claims 46 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Browne in view of Schwob, further in view of Kirkland and further in view of Guenther et al. (US 5,086,510).

Claims 46 and 50: The combination of Browne, Schwob and Kirkland teaches all limitations of claims 46 and 50, except that the user interface includes: a manual input device adapted to be mountable on an automobile steering wheel; and a link from the manual input device to the controller.

However, Guenther discloses a control system on automobile steering wheels (figure 4) for the benefit of better visibility of controls for the user.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include a manual input device adapted to be mountable on an automobile steering

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wheel; and a link from the manual input device to the controller, as disclosed in Guenther, for the benefit of better visibility of the controls for the user.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include a manual input device adapted to be mountable on an automobile steering wheel; and a link from the manual input device to the controller, as disclosed in Guenther, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

3.5 Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Browne in view of Schwob, further in view of Kirkland and further in view of Benbassat et al (US 4,700,322).

Claim 47: The combination of Browne, Schwob and Kirkland teaches all limitations of claim 47, except that the user interface includes a control for determining a speed at which the speech producing sub-system outputs the analog signal.

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Benbassat teaches an interface for determining the speed at which the speech device output the output signal as can be seen in (column 1, lines 28-50) for the benefit of synchronizing speech with the visualization of messages.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include that the user interface includes a control for determining a speed at which the speech producing sub-system outputs the analog signal, as taught by Benbassat, for the benefit of synchronizing speech with the visualization of messages.

3.6 Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Browne in view of Schwob, further in view of Kirkland and further in view of Whitby et al (GB 2 258 102).

Claim 48: The combination of Browne, Schwob and Kirkland teaches all limitations of claim 48, except that the tuner channel skips to tune to a particular transmitter.

Whitby teaches a tuner adapted to skip channels to get to the desired transmitter, as seen in page 6, lines 13-21 for the benefit of presetting the device to access a specific transmitter.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include to skip channels to get to the desired transmitter, as taught by Whitby for the benefit of presetting the device to access a specific transmitter.

3.7 Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Browne in view of Schwob, further in view of Kirkland and further in view of Date "An introduction to Database Systems".

Claim 51. The combination of Browne, Schwob and Kirkland teaches all limitations of claim 51, except explicitly teaching designating a hierarchy for the database.

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However, Date discloses designating a hierarchy for the database in the database arts for structured storage.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include to create a hierarchical database as disclosed in Date, as an old and well known method of structuring a database.

3.8 Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over Browne in view of Schwob, further in view of Kirkland further in view of De Bey and further in view of Yoshio et al ('631).

Claim 55. The combination of Browne, Schwob, Kirkland and De Bey teaches all limitations of claim 55, except that the disk medium is a magnetic-optical disk.

Yoshio ('631) further discloses disk medium is a magnetic-optical disk, see page 27, lines 18-19. The motivation to combine the references would be to utilize standard media for recording for the benefit of maximizing public acceptance of the product.

3.9 Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Browne in view of Schwob, further in view of Kirkland and further in view of Official Notice.

Claim 57. The combination of Browne, Schwob, and Kirkland teaches all limitations of claim 57, except that speed of transmission of the data in the broadcast signal is varied to most efficiently use the available bandwidth.

Official Notice is taken that it is old and well known in the network arts to vary transmission speeds to most efficiently use the available bandwidth.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include varying the

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transmission of the broadcast signal for the benefit of most efficiently use the available bandwidth.

3.10 Claim 62 is rejected under 35 U.S.C. 103(a) as being unpatentable over Browne in view of Schwob, further in view of Kirkland and further in view of Wysong.

Claim 62: While Schwob teaches that the receiver is adapted to receive and store in the memory updates of the data, the combination of Browne, Schwob, and Kirkland does not explicitly teach that said receiver continuously receives said program.

Wysong discloses a radio broadcasting system including a transmitter, which transmits a substantially continuous program, and a receiver for receiving the continuous program (Abstract).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination of Browne, Schwob, and Kirkland to include that said receiver continuously receives said program, as disclosed in Wysong, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

3.11 Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over Browne in view of Schwob, further in view of Kirkland, further in view of Wysong and further in view of Ryan.

Claim 63.

The combination of Browne, Schwob, Kirkland and Wysong teaches all limitations of claim 63, except that received items of data include a data stamp to indicate currency of the data, which is disclosed in NN9204297 (page 1, line 18).

In this case, each of the elements of the cited references combined by the Examiner performs the same function when combined as it does in the prior art. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include that received items of data include a data stamp thereby to indicate currency of the data, as disclosed in NN9204297, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

3.12 Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over Browne in view of Schwob, further in view of Kirkland and further in view of Myers et al. (US 5,272,752).

As per Claim 64.

The combination of Browne, Schwob, and Kirkland teaches all limitations of claim 64, except that the receiver is adapted to disable itself upon receipt of a command received via the tuner.

Myers teaches an authorization code lockout mechanism for preventing unauthorized reception of transmitted data, wherein a valid receiver is adapted to receive an addressed transaction which gives the receiver the current "authorization code". After this command has been sent to the receiver, a global transaction is sent to the receiver containing the current and previous authorization codes. If the receiver receiving this transaction does not find a match between its stored authorization code and either of the transmitted authorization codes, it will disable itself (C. 2, L. 25-40).

In this case, each of the elements of the cited references combined by the Examiner performs the same function when combined as it does in the prior art. Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify the combination to include that the receiver is adapted to disable itself upon receipt of a command received via the tuner, as disclosed in Myers, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82

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USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

3.13 Claims 91-92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Browne in view of Schwob, further in view of Wysong and further in view of Kirkland.

Claims 1 and 58: Browne teaches a receiver adapted to receive data contained in a transmitted broadcast signal comprising:

- a tuner that receives a broadcast signal, (Fig. 7, item 702; page 9, lines 20-24);

- a memory coupled to the tuner for storing data in the received broadcast signal in a database, (Fig. 1, item 104);

- a processor, coupled to the tuner and the memory, the processor processes the received broadcast signal including data, stores the data as a database in a memory, provides a user interface for providing a set of menus describing the database, and for accepting selections from the set of menus (Fig. 1, item 105a; page 13, lines 27- page 14, line 8);

- for selecting data from the database in response to the accepted selections and providing the selected data in a digital form (Fig. 1, items 104, 105, 105a; page 13, lines 18- page 14, line 8); and

- a speech producing sub-system coupled to the controller and the memory for converting the selected data from digital form to an analog signal (Fig. 1, item 110; page 15, lines 7-13), wherein the processor controls operation of analog and digital signals.

Browne does not explicitly teach that received data includes updated data, and that said data, stored in the database, includes said received updated data

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(updating the database with the second data in response to receiving the second data).

However, Browne teaches upon receiving new data in the memory, deleting/overwriting the old one (page 7, line 14 – page 8, line 14), thereby suggesting said feature. Further, Browne teaches the use of stereo audio outputs for listening programs on television sets, thereby suggesting the use of an audio amplifier.

Schwob ('011) disclose a broadcast receiver including an audio amplifier and speakers for reproducing a recorded broadcasted signal, Fig. 1 (26), said receiver is configured for automatically updating its database (Abstract; C. 8, L. 5-10). Schwob further discloses a user interface having user input means for interaction with a receiver, including buttons corresponding to various type of programming, including news, classical music, jazz, etc., and means for presenting selected information in succession to the user (Fig. 5, "200"). In use, the user, by repeatedly pressing appropriate buttons interacts with receiver database for selecting appropriate information for desired geographical region (C. 10, L. 40-65; C. 11, L. 20-45).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify Browne to include the recited limitations, as taught by Schwob ('011), for the benefit of amplifying signals sent to speakers, and for the benefit of eliminating the need to replace the ROM too often, as specifically stated in Schwob.

Alternatively, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to modify Browne to include the recited limitations, as taught by Schwob ('011), since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one

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skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

The combination of Browne and Schwob does not explicitly teach that said receiver receives said program continuously.

Wysong discloses a radio broadcasting system including a transmitter, which transmits a substantially continuous program, and a receiver for receiving the continuous program (Abstract).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination to include that said receiver continuously receives said program, as disclosed in Wysong, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950).

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The combination of Browne, Schwob, and Wysong does not specifically teach a switch that provides the data to the speech synthesizer or the audio amplifier, wherein, if the data is the alphanumeric data, the switch provides the alphanumeric data to the speech synthesizer and, if the data is the audio data, the switch provides the audio data to the audio amplifier, which is disclosed in Kirkland (Fig. 1, "105" acts as a switch; separates incoming data to text-to-speech processing "106" or audio processing "audio" output to "108"; Fig. 2, note the amplifier "203"; C. 6, L. 29-46; C. 7, L. 13-28).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination of Browne, Schwob, and Wysong to include the recited limitations, as disclosed in Kirkland, because it would advantageously allow transmission services via channels for which there is less competition, and whereby the descriptions may be provided in stereo, as specifically stated in Kirkland (C. 2, L. 19-22).

Alternatively, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combination of Browne, Schwob, and Wysong to include the recited limitations, as disclosed in Kirkland, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. KSR, 550 U.S. at, 82 USPQ2d at 1395; Sakraida v. AG Pro, Inc., 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp., 340 U.S. 147, 152, 87 USPQ 303, 306 (1950)

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As per Claim 92. The receiver according to claim 1, wherein the broadcast signal is transmitted by a source not in response to a request from the receiver (Same reasoning as applied to claim 1).

Response to Arguments

Applicant's arguments with respect to claims 1 and 33-92 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igor Borissov whose telephone number is 571-272-6801. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Igor N. Borissov/
Primary Examiner, Art Unit 3628
12/03/2012